

## **White Paper**

### **Roundtable Discussion: Mobilizing Climate Finance in India for Mitigation and Adaptation**

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# CONTENTS

<b>Context</b>	<b>3</b>
<b>KEY Takeaways</b>	<b>4</b>
Session 1: Role of Financial Sector Policy and Regulations in increasing climate finance	4
A. Improving decision-making on capital allocation to climate investments through structured guidelines and disclosures	5
B. Reducing risk and cost of capital for green investments	6
C. Channelizing capital to green investments through use-of-proceed instruments	6
D. Channeling capital through mandates or incentives to climate investments	7
E. Building capacity for measurement and reporting	8
F. Greening Public Expenditure/Investment with a focus on Adaptation	8
Session 2: Role of Banking, Financial Services and Insurance Sector	9
A. Ratings and financing climate action	9
B. Aggregation for climate investments	10
C. Measuring and managing climate risk	10
Summary	10

## CONTEXT

The current investment at a global level is around \$632 billion, which falls short of the desired levels of climate investments required, conservatively estimated at \$4.4–\$5 trillion annually<sup>1</sup>.

Estimates suggest that India needs approximately INR 162.5 lakh crores (USD 2.5 trillion) till 2030 for NDCs<sup>2</sup> and INR 716 lakh crores (USD 10.1 trillion) to achieve Net-Zero emissions by 2070<sup>3</sup>. However, the currently tracked climate finance flows in India amount to roughly 25% of the total requirement across sectors just to meet the NDCs<sup>4</sup>.

India has largely used its own resources to meet with the requirements of its climate actions. The flow of fund from developed countries to developing countries has been very low. Mobilisation of private capital is vital. This can be achieved by leveraging public finance to de-risk climate investments and mobilise additional private finance. Rapid deployment of clean technologies in carbon-intensive sectors and innovation lies at the heart of India's transition to a low-carbon economy. However, financing these technologies and cleaner business models can be challenging because cleaner technologies are perceived riskier; and thus, commercial financial flows to application of clean technologies are limited. To encourage the flow of private capital, public interventions aimed at creating an enabling environment and designing instruments to mitigate the perceived risks are also important.

It is also important to focus on Adaptation and Resilience in India because of country's high climate vulnerability, and increasing frequency and intensity of climate-related natural disasters. In India around 12% of total land area is exposed to floods, about 68% of land is vulnerable to droughts, landslides and avalanches, 58.6 % landmass is earthquake-prone, and 5,700 km of the 7,516-km long coastal line is highly vulnerable to frequent cyclones<sup>5</sup>. This vulnerability to natural disaster events along with the vulnerability to slow onset of climate change processes, like sea level rise and desertification, highlights the need to prioritize adaptation to climate change. As per the recent estimates<sup>6</sup>, India needs to invest an additional \$1 trillion in adaptation and resilience between 2015 and 2030, i.e. \$67 billion annually till 2030.

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<sup>1</sup> Climate Policy Initiative. 2021. Global Landscape of Climate Finance 2021. Available at: <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/>

<sup>2</sup> DEA. 2020. Report of the Sub-Committee for the Assessment of the Financial Requirements for Implementing India's Nationally Determined Contribution (NDC). Available at: [https://dea.gov.in/sites/default/files/Sub Committee Report Final.pdf](https://dea.gov.in/sites/default/files/Sub%20Committee%20Report%20Final.pdf)

<sup>3</sup> CEEW. 2021. Investment Sizing India's 2070 Net-Zero Target. Available at: <https://cef.ceew.in/solutions-factory/publications/CEEW-CEF-Investment-Sizing-India%E2%80%99s-2070-Net-Zero-Target.pdf>

<sup>4</sup> Climate Policy Initiative. 2022. Landscape of Green Finance 2022. Available at: <https://www.climatepolicyinitiative.org/publication/landscape-of-green-finance-in-india-2022>.

<sup>5</sup> <http://ndma.gov.in/sites/default/files/PDF/Reports/NDMA-Annual-Report-2018-19-English.pdf>

<sup>6</sup> <https://shaktifoundation.in/climate-finance/>

A roundtable discussion on enabling greater capital flows for climate action with a focus on domestic financial intermediation was held at IIT Madras Campus, Chennai on 17 June 2023.

The roundtable discussions focussed on two key areas:

1. **Role of Financial Sector Policy and Regulations** and steps required to increase climate finance.
2. **Role of Banking, Financial Services and Insurance Sector** including financial innovation for mitigation and adaptation that recognizes differential risk-return profile, role of public investments and grants in mobilising private finance, rearing up capital markets for climate finance and innovative solutions for managing risks of climate-related projects.

## KEY TAKEAWAYS

### SESSION 1: ROLE OF FINANCIAL SECTOR POLICY AND REGULATIONS IN INCREASING CLIMATE FINANCE

Broad questions included:

- a. The Government of India (GoI) as well as the regulators are taking proactive steps to focus on issues related to climate change. However, given the urgency and the scale of climate action required, what more can policymakers and regulators do?
- b. Taxonomy plays an important role in building confidence of the market and enabling finance flows. What steps can be taken to ensure that the absence of taxonomy does not hamper the climate finance flows?
- c. What are your views on expanding the Priority Sector Lending (PSL) for enabling climate investments?

During this session, stakeholders discussed India's development priorities, state of green finance in India – issues and constraints, provided inputs on enabling policy and regulation and mentioned several on-going initiatives by the policy makers, regulators and development financial institutions (DFIs) specifically SIDBI.

Considering India's unique development context, in terms of low carbon growth imperative, the stakeholders also focused on the measures needed to channel greater flow of green finance to a wider range of sectors beyond renewable energy through policy and regulatory measures.

## A. IMPROVING DECISION-MAKING ON CAPITAL ALLOCATION TO CLIMATE INVESTMENTS THROUGH STRUCTURED GUIDELINES AND DISCLOSURES

1. **Sustainable Finance Taxonomy:** A sustainable finance taxonomy can help build confidence in the market, minimize greenwashing and can enable greater capital flow to green activities. Since India is a developing country, the sustainable finance taxonomy could also include activities that are important for 'transition'. However, in the meantime, other frameworks such as the [Green Bond Framework](#) or the green deposit framework could provide guidance for making decisions related to green investments.
2. **Benchmarks:** Benchmarks can help us assess the degree of positive impact (in terms of reduction in emissions, and co benefits on overall sustainable development) and on the environment for different technology options. For example, what are the emission reduction benefits when we switch 'Technology A' with 'Technology B'. This can also help us assess the feasibility in terms of cost. The government could introduce these benchmarks to improve the 'quality' of our green investments and facilitate easier decision-making for investors.
3. **Disclosures on Financed emissions:** [Business Responsibility and Sustainability Reporting \(BRSR\)](#) mandates top 1000 companies to report data on their emissions. However, there is no similar mandate for financial institutions to report their financed emissions. Measuring financed emissions can be key to shifting capital to green investments and therefore, stakeholders suggest mandatory disclosure of data financed emissions for all financial institutions.
4. **Verification for use-of proceeds:** India has a [Green Bond Framework](#) defining the use-of-proceeds. However, we are yet to introduce a verification mechanism for these green bonds. The government can help make green bonds proceeds more transparent, avoid greenwashing and help build investor confidence by introducing a verification system.
5. **National databank for GHG emission:** Emissions are currently calculated bottom-up using the data on energy with normative benchmarks which are approximate. A national databank on emissions/GHG inventory might help bringing transparency to the system and provide for metrics/standards for measuring GHG emissions from India's large MSME sector. This would go a long way in improving green competitiveness of India's manufacturing initiatives.

## B. REDUCING RISK AND COST OF CAPITAL FOR GREEN INVESTMENTS

Domestic Innovation, coupled with technology transfer, and faster deployment lies at the heart of India's transition to a low-carbon economy. Since most of the investments in green technologies require high upfront investments and are perceived to be risky (which gets manifested as higher financial risk) making cost of capital higher for such investments. Therefore, commercial financing of business and projects with these climate technologies is constrained.

**Financial Risk mitigation for green investments at the domestic level** could reduce the cost of capital (mainly debt financing) attract private investments and help mobilise greater financial flows for green activities. A few DFIs like SIDBI provide credit guarantees for de-risking energy efficiency investments in the MSME sector. This could be replicated and scaled for wider climate investments as and focus SIDBI as a green financial institution.

It was also suggested that MoF, Gol could consider institutionalising a **credit guarantee scheme, which could be anchored by a public financial institution**. It would also be important to ensure that the pricing of such a guarantee / credit enhancement is 'affordable', and that it does not make the overall funding cost unviable. This is important since patient capital needs to flow to climate investments.

## C. CHANNELIZING CAPITAL TO GREEN INVESTMENTS THROUGH USE-OF-PROCEED INSTRUMENTS

The concern regarding higher perceived risk extends to capital markets as well, thus necessitating a need for specialized instruments. Participants identified use of proceed instruments as a necessary intervention.

**Green Bonds:** Defined 'use-of-proceeds' instruments such as green bonds could channel finance through capital markets towards climate action. GOI issued [sovereign green bonds](#) earlier this year, which managed to achieve a 'greenium' (lower yield that investors will accept for the green label). This has a positive signalling effect for the market. Irrespective of lower rates attained, sovereign green bonds provide a channel for directed utilisation of proceeds for climate action at the public expenditure level and also be used for leveraging private/commercial green investments.

More such bonds could be issued to channel more financial resources to climate action. Following this example, Maharashtra [announced intentions](#) to issue green bonds as well which could pave the way for sub sovereign green bonds and greening of state development loans.

Creating local demand for green bonds is as important as issuing these bonds. Regulatory measures could help create demand for green bonds through-

1. Mandating pension and insurance funds to subscribe to green bonds.
2. Considering some of the green bonds, subject to certain conditions, as eligible for Statutory Liquidity Ratio (SLR) requirements.
3. Reconsider investment restrictions on insurance companies to facilitate capital flow.

## D. CHANNELING CAPITAL THROUGH MANDATES OR INCENTIVES TO CLIMATE INVESTMENTS

Most stakeholders widely believe that regulatory mandates are needed for corporates and financial institutions to contribute to climate action and green finance flows.

Possible **regulatory mandates**, as discussed, could include:

1. **Expanding the scope of Priority Sector Lending (PSL):** The RBI regulations require banks to allocate 40% of their adjusted net bank credit (ANBC) for the priority sector which includes agriculture, MSMEs, exports, social infrastructure, renewable energy etc. The government can help channel financial flows to other green activities by expanding the mandate of PSL to match the activities defined in RBI's Green Deposit Framework.
2. **Bond issuance by corporates:** In 2018, SEBI introduced a [mandate](#) for large corporates to raise a portion of their debt through bonds. The overarching aim of the regulation was to deepen the bond market. A similar push could be provided to deepen the green bond market. This would mean that certain entities would be required to raise a portion of their debt through issuing green bonds.
3. **Leveraging target:** For ensuring that DFIs crowd-in more private investments rather than crowding them out, the government could introduce leveraging targets for DFIs.

Possible **incentives**, as discussed, could include:

1. **Incentives to retail sector for green deposits:** In April of this year, RBI launched the [Framework for acceptance of Green Deposits](#). Stakeholders discussed that the government could offer a lower tax rate on earnings from green deposits to incentivize retail customers to make these deposits.
2. **Incentives for banks:** Parallely, to incentivise banks and to enable them to lend more against green deposits, the government could reduce the Cash Reserve Ratio (CRR) requirements against green deposits for the banks.

## E. BUILDING CAPACITY FOR MEASUREMENT AND REPORTING

It would be important to think about building capacity for measuring and reporting of emission data (along with other environmental impact data) by all sectors. This would mean:

1. Capacity building for financial institutions (FIs) to measure and report their financed emissions and manage climate related financial risk, both physical and transition
2. Capacity building for real sector, especially MSMEs to measure their carbon emissions, but this may require standards /norms to be defined by the government.

This is especially important because MSMEs or other players in the supply chain might not be mandated in India to report their carbon emissions, however, initiatives like Carbon Border Adjustment Mechanism (CBAM) and wider acceptance of Task Force on Climate-related Financial Disclosure (TCFD) reporting might prompt global companies to collect this information from their down-stream suppliers.

## F. GREENING PUBLIC EXPENDITURE/INVESTMENT WITH A FOCUS ON ADAPTATION

Adaptation activities usually lack clear business models and therefore, largely rely on public expenditure. As a result, enabling greater financial flows to adaptation requires specific policy recommendations, which includes-

1. **Green budget tagging** could help assess the expenditure vis-à-vis needs of different sectors and can enable resource allocation to priority sectors.
2. **Green finance at sub-national level-** Since adaptation action is local, making finance available at sub-national level is important. The Government could look at different avenues such as 'Green State Development Loans (SDLs)' to enable states to raise more green finance.
3. **Insurance for low-income households:** Low-income households are disproportionately affected by impacts of climate change. Providing insurance coverage to such households for climate-related damages could enhance capacity to cope with these damages- with public budgets contributing to the premiums for insurance.
4. **Patient Capital and PPP route** – There is a need for capital which is longer term and has a more holistic view. To achieve this exploring different funding options and methods is important. This includes Public Private Partnership (PPP) models for insurance, infrastructure, and others. Also, needs to look at innovation in blended finance approach.



## SESSION 2: ROLE OF BANKING, FINANCIAL SERVICES AND INSURANCE SECTOR

The second session focused on the role of banks, financial services and insurance

Broad questions include:

- a. ESG has gained prominence in recent times and receives both good and bad press. What role does ESG play in mobilizing finance flows for climate? Does it support the cause or does it lend itself to green washing thereby distracting from the main agenda?
- b. What steps can markets and institutions take independent of regulation and policy to further climate finance flows?
- c. With increased extreme climate events occurring, instance of high debt impact increases. What is required to create an enabling environment to encourage such innovation in the financial sector?

(BFSI) in contributing to climate finance. Stakeholders discussed how credit ratings as well as ESG ratings affect capital allocation for climate action. Several members emphasised on the importance of aggregation of climate start-ups to attract investments. Finally, stakeholders emphasised that managing climate risk is as important as enabling climate finance.

### A. RATINGS AND FINANCING CLIMATE ACTION

The reliance of the financial sector on conventional credit ratings could discourage capital investment in climate-related economic activities – businesses and projects. This is because these enterprises, when assessed through the traditional credit rating lens are highly likely to turn out as high-risk category, thereby finding it challenging to attract capital, especially debt capital. Many consider ESG Ratings to be a tool to channel capital for climate-related activities. While ESG ratings are good, they provide an aggregate number and might not be representative of entity's emissions.

In this context, it is important to additionally think about a rating framework that looks solely at emissions (or emission intensity) over a period of time. Such a **'carbon/emissions rating framework'** which would provide incentives for improvements in emissions to carbon intensive industries.

## B. AGGREGATION FOR CLIMATE INVESTMENTS

A large number of entities deploying innovative climate solutions are small start-ups, that can absorb only small amounts of capital in the initial phase. This translates into a relatively high underwriting/transaction cost in their case.

Aggregation in these cases, can help diversify risks and reduce transaction costs. Stakeholders suggested that a **climate aggregation vehicle** with the presence of a DFI can help.

This aggregation can also help with harnessing private wealth. This could be done through a vehicle backed by a DFI. For example, in Switzerland and Netherlands, High Net worth and Individual participation is high for clean energy.

## C. MEASURING AND MANAGING CLIMATE RISK

Climate related financial risk can lead to erosion of collateral value and a change in asset prices. While enabling climate finance is important, it is equally important to measure and manage climate related financial risks.

It is important to measure, manage and mitigate climate related financial risks. Climate modelling plays an important role here and thus need for appropriately granular and informative disclosures is critical.

One way to manage risk is to use de-risking instruments such as insurance. In cases where climate risks are particularly high, the concern is that assets might not be insurable because of very high premiums.

## SUMMARY

Climate finance investments in India are much below the estimated needs. Timely mobilization of adequate financial resources for climate action is a priority for India.

Mobilising greater climate finance from domestic sources (banks, financial markets, and public finance) requires policy and regulatory support in many ways. This includes introducing a sustainable finance taxonomy for easier and efficient capital allocation. Since climate investments are perceived to be risky, government support through a credit enhancement scheme for climate investments could help crowd-in private investments. Additionally, a focus on banks and financial instruments to direct capital towards green activities is crucial. The issuance of sovereign green bonds is a welcome step in this direction. Finally, recognising climate change as a market failure, implementing regulatory mandates or incentives becomes essential to channel capital to climate action.

Public financial institutions can help in aggregation of climate investments to reduce transaction costs.